Amendments to the Claims

The current listing of the claims replaces all previous amendments and listings of the claims.

1.-14. (Canceled)

15. (Currently Amended) ~~The~~ A camera apparatus ~~as claimed in claim 14~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a number-of-gray-scale-level determining unit configured to allocate area-dependent numbers of gray scale levels to the respective areas of the image in response to the determination by the importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory,

wherein said number-of gray-scale-level determining unit increases the number of gray scale levels in a first area compared with a second area that has a smaller level of importance than the first area.

16. (Canceled)

17. (Previously Presented) A camera apparatus, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a color interpolation processing unit configured to change color interpolation processing for the respective areas of the image in response to the determination by the importance computation unit,

wherein said color interpolation processing unit performs a first processing in a first area, and performs a second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than this first processing.

18. (Canceled)

19. (Currently Amended) ~~The~~ A camera apparatus ~~as claimed in claim 18~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a sharpness enhancement processing unit configured to apply area-dependent sharpness enhancement processing to the respective areas of the image in response to the determination by the importance computation unit, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory,

wherein the sharpness processing unit performs a first processing in a first area, and performs a second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

20. (Canceled)

21. (Previously Presented) A camera apparatus, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a noise removal processing unit configured to change noise removal processing for the respective areas of the image in response to the determination by the importance computation unit,

wherein said noise removal processing unit performs a first processing in a first area, and performs a second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

22. (Canceled)

23. (Currently Amended) A method of acquiring an image, comprising the steps of:

acquiring an image;

detecting a point of eye fixation of a user within a camera screen;

determining levels of importance for respective areas of the acquired image in accordance with the detection of the point of eye fixation; and

assigning area-dependent numbers of gray scale levels to the respective areas of the image in response to the determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory,

wherein assigning area-dependent numbers of gray scale levels increases the number of gray scale levels in a first area compared with a second area that has a smaller level of importance than the first area.

24. (Currently Amended) A method of acquiring an image, comprising the steps of:

acquiring an image;

detecting a point of eye fixation of a user within a camera screen; determining levels of importance for respective areas of the acquired image in accordance with the detection of the point of eye fixation; and

applying area-dependent color interpolation processing to the respective areas of the image in response to the determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory,

wherein applying area-dependent color interpolation processing performs first processing in a first area, and performs second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than this first processing.

25. (Currently Amended) A method of acquiring an image, comprising the steps of:

acquiring an image;

detecting a point of eye fixation of a user within a camera screen;

determining levels of importance for respective areas of the acquired image in accordance with the detection of the point of eye fixation; and

applying area-dependent sharpness enhancement processing to the respective areas of the image in response to the determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory,

wherein applying area-dependent sharpness enhancement processing performs first processing in a first area, and performs second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

26. (Currently Amended) A method of acquiring an image, comprising the steps of:

acquiring an image;

detecting a point of eye fixation of a user within a camera screen;

determining levels of importance for respective areas of the acquired image in accordance with the detection of the point of eye fixation; and

applying area-dependent noise removal processing to the respective areas of the image in response to the determined levels of importance, thereby reducing a processing time required for processing less important areas of the image to reduce a total processing time required for processing an entirety of the image prior to storage of the image in memory,

wherein applying area-dependent noise removal processing performs first processing in a first area, and performs second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

27. (Canceled)

28. (Currently Amended) ~~The~~ A camera apparatus ~~as claimed in claim 27~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a number-of-gray-scale-level determining unit configured to change a number of gray scale levels for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein said number-of-gray-scale-level determining unit increases the number of gray scale levels in a first area compared with a second area that has a smaller level of importance than the first area.

29. (Canceled)

30. (Currently Amended) ~~The~~ A camera device ~~as claimed in claim 29~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a color interpolation processing unit configured to change color interpolation processing for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein said color interpolation processing unit performs first processing in a first area, and performs second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

31. (Canceled)

32. (Currently Amended) ~~The~~ A camera device ~~as claimed in claim 31~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a sharpness enhancement processing unit configured to change sharpness enhancement processing for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein the sharpness processing unit performs first processing in a first area, and performs second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

33. (Canceled)

34. (Currently Amended) ~~The~~ A camera device ~~as claimed in claim 33~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

a noise removal processing unit configured to change noise removal processing for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein said noise removal processing unit performs first processing in a first area, and performs second processing in a second area that has a smaller level of importance than the first area, the first processing generating an image having higher quality than the second processing, and the second processing being faster than the first processing.

35. (Canceled)

36. (Currently Amended) ~~The~~ A camera apparatus ~~as claimed in claim 35~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

an image processing unit configured to perform at least one of changing a number of gray scale levels for the respective areas of the image, changing color interpolation processing for the respective areas of the image, changing sharpness enhancement processing for the respective areas of the image, and changing noise removal processing for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein said importance computation unit is configured to determine a single point as an area of importance based on the point of eye fixation and to determine the levels of importance in response to a distance between the area of importance and respective points in the image.

37. (Currently Amended) ~~The~~ A camera apparatus ~~as claimed in claim 35~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

an image processing unit configured to perform at least one of changing a number of gray scale levels for the respective areas of the image, changing color interpolation processing for the respective areas of the image, changing sharpness enhancement processing for the respective areas of the image, and changing noise removal processing for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein said importance computation unit is configured to determine an area of importance based on the point of eye fixation and to determine the levels of importance according to a distribution defined by a position relative to a center of the area of importance, a size of the area of importance, and a magnitude at the center of the area of importance.

38. (Previously Presented) The camera apparatus as claimed in claim 37, wherein said area of importance has one of a circle shape and an ellipse shape.

39. (Currently Amended) ~~The~~ A camera apparatus ~~as claimed in claim 35~~, comprising:

a camera unit configured to acquire an image;

a line-of-sight detection unit configured to detect a point of eye fixation of a user within a camera screen;

an importance computation unit configured to determine levels of importance for respective areas of the image acquired by said camera unit in accordance with the detection by said line-of-sight detection unit; and

an image processing unit configured to perform at least one of changing a number of gray scale levels for the respective areas of the image, changing color interpolation processing for the respective areas of the image, changing sharpness enhancement processing for the respective areas of the image, and changing noise removal processing for the respective areas of the image in response to the determination by the importance computation unit, thereby simplifying processing for less important areas of the image compared to more important areas of the image based on comparison of the levels of importance of the less important areas of the image with the levels of importance of the more important areas of the image,

wherein said importance computation unit is configured to determine at least two areas of importance in accordance with the detection by said line-of-sight detection unit and to determine a level of importance of any given point in response to a distance between the given point and a first one of said at least two areas of importance and a distance between the given point and a second one of said at least two areas of importance.

40.-43. (Canceled)